Name: HW16\_LineSegments

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Geometry, Period

Due Date: Wed, 17 Sep 2014

**Geometry**

**Homework**



**Failure to show work and write in complete sentences will result in a LaSalle. Answers should be boxed.**

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| 1. Measure the following line segments to the nearest tenth of a centimeter and the nearest of an inch.    AB: \_\_\_\_\_\_\_\_ centimeters \_\_\_\_\_\_\_\_\_ inches  CD: \_\_\_\_\_\_\_\_ centimeters \_\_\_\_\_\_\_\_\_ inches | | 2. On a particular line segment, points *A*, *B*, and *C* are collinear, and *B* is between *A* and *C*. If *AB* = 15 and *BC* = 9, what is the measure of *AC*? | | |
| 3. Find *KM.* | | 4. Find *ST.* | | |
| 5. Find *BC.* | | 6. If *AC* = 35, what is the value of MC?  x + 5 2x  A M C | | |
| 7. On the map, AB represents a trail that you are hiking. You start from the beginning of the trail and hike for 90 minutes at a rate of 1.4 miles per hour. How much farther do you need to hike to reach the end of the trail? | | 8. **On a separate sheet of graph paper**, plot the given points in a coordinate plane. Then state whether the line segments are congruent.   1. Plot the points *A*(2, 2), *B*(4, 2), *C*(–1, –1), *D*(–1, 1)   Are AB and CD congruent? \_\_\_\_\_\_\_\_\_\_\_\_\_   1. Plot the points *M*(1, –3), *N*(4, –3), *O*(3, 4), *P*(4, 4)   Are MN and OP congruent? \_\_\_\_\_\_\_\_\_\_\_\_\_   1. Plot the points *E*(–3, 4), *F*(–1, 4), *G*(2, 4), *H*(–1, 1)   Are EG and FH congruent? \_\_\_\_\_\_\_\_\_\_\_\_\_ | | |
| 9) Find *LM*. | 10) Find *VW*. | | | 11) Find *YZ*. |
| 12) Determine the slope of the line: \_\_\_\_    b) What is the y-intercept? \_\_\_\_ | | | 13) Determine the slope of the line: \_\_\_\_    b) What is the y-intercept? \_\_\_\_\_ | |
| 14a) Which line has  A  B  C  D  E  the smallest slope?    b) Which line has  the biggest slope?  c) What is the  slope of line B?  d) What is the slope  of the line C? | | | 15) Sketch the graph of a line that crosses through the point (-5, 0) and has a slope of 2. | |
| 16) Ana builds a doll house on her own for an hour. At that time, her mother starts helping her build, and they work together at a rate of twice the speed Ana was working alone.  *Plot the scenario on the graph below:*  Completion  Of Doll House    Time | | | 17) **Error Analysis.** Terrell determined that the slope of the line below is . Is he correct? *Why* or *why not* ? | |
| 18) **Explain.** James lets a tennis ball roll down a ramp that has a height of 8 feet and a length of 12 feet. Summer lets a tennis ball of the same dimensions roll down another ramp that has a height of 3 feet and a length of 10 feet. Whose ball will get to the end of the ramp first? *Why? Be specific.* | | | | |